

Amendments to the Claims:

1. **(Currently amended):** An isolated amino acid sequence comprising amino acids 17 to 180 of SEQ ID NO: 2[[,]],
[[:]]
~~wherein said sequence provides prophylactic or therapeutic treatment of an infection or its clinical signs caused by an organism of the family Babesiidae.~~
2. (Previously presented): The sequence according to claim 1, comprising SEQ ID NO 2.
3. (Withdrawn): The sequence according to claim 1, comprising SEQ ID NO 4 or an immunogenic fragment thereof.
4. **(Currently amended):** [[A]] **An isolated** nucleic acid that encodes the sequence according to claim 1.
5. (Previously presented): The nucleic acid according to claim 4 comprising SEQ ID NO: 1.
6. (Withdrawn): The nucleic acid according to claim 4 comprising SEQ ID NO: 3.
7. **(Currently amended):** [[A]] **An isolated** cDNA fragment comprising the nucleic acid according to claim 4.
8. (Previously presented): A recombinant DNA molecule comprising the nucleic acid according to claim 4, under the control of a functionally linked promoter.

9. (Previously presented): A live recombinant carrier comprising the nucleic acid according to claim 4.
10. (Previously presented): A host cell comprising the nucleic acid according to claim 4.
11. (Currently amended): A vaccine comprising
 - i) ~~the sequence according to claim 1;~~ an isolated amino acid sequence comprising amino acids 17 to 233 of SEQ ID NO:2, and
 - ii) a pharmaceutically acceptable carrier.
12. (Previously presented): The vaccine according to claim 11, further comprising an adjuvant.
13. (Previously presented): The vaccine according to claim 11, further comprising an additional immunoactive component or a nucleic acid encoding said additional immunoactive component.
14. (Previously presented): The vaccine according to claim 13, wherein said additional immunoactive component or nucleic acid encoding said additional immunoactive component is obtained from an organism selected from the group consisting of *Ehrlichia canis*, *Babesia gibsoni*, *B. vogeli*, *B. rossi*, *Leishmania donovani*-complex, Canine parvovirus, Canine distempervirus, *Leptospira interrogans* serovar *canicola*, *Leptospira interrogans* serovar *icterohaemorrhagiae*, *Leptospira interrogans* serovar *pomona*, *Leptospira interrogans* serovar *grippityphosa*, *Leptospira interrogans* serovar *bratislava*, Canine hepatitisvirus, Canine parainfluenzavirus, rabies virus, *Hepatozoon canis* and *Borrelia burgdorferi*.
15. (Previously presented): A vaccine comprising
 - i) an antibody against the sequence according to claim 1, and
 - ii) a pharmaceutically acceptable carrier.

16. (Withdrawn): A method for the preparation of a vaccine comprising the admixing of
 - i) the sequence according to claim 1, and
 - ii) a pharmaceutically acceptable carrier.
17. (Withdrawn): A method for the preparation of a vaccine comprising the admixing of
 - i) an antibody against the sequence according to claim 1 and
 - ii) a pharmaceutically acceptable carrier.
18. (Withdrawn): A method of prophylaxis or treatment of an infection or its clinical signs caused by an organism of the family Babesiidae, comprising administering a vaccine comprising the sequence according to claim 1.
19. (Previously presented): A diagnostic test for the detection of a nucleic acid associated with an organism of the family Babesiidae, comprising a nucleic acid sequence selected from the group consisting of:
 - (i) SEQ ID NO: 1;
 - (ii) a fragment of SEQ ID NO: 1 at least 15 nucleotides long; and
 - (iii) a nucleic acid that is complementary to (i) or (ii).
20. (Previously presented): A diagnostic test for the detection of antibodies against an organism of the family Babesiidae, comprising the sequence according to claim 1.
21. (Previously presented): A diagnostic test for the detection of antigenic material from an organism of the family Babesiidae, comprising an antibody against the sequence according to claim 1.